City of Kingsport,
Tennessee

Stormwater Utility
Credit and Adjustment Manual

December 2011

Kingsport
TENNESSEE

Manual

Section 1
Introduction

In 2003, the City was issued a National Pollutant Discharge Elimination System (NPDES) Phase II stormwater permit. This federally mandated program requires the City of Kingsport to implement a comprehensive stormwater management program that includes, but is not limited to, six major program elements: 1) public education & outreach, 2) public involvement, 3) illicit discharge detection and elimination; 4) construction site runoff control, 5) post-construction site runoff control, and 6) pollution prevention and good housekeeping. An updated version of the permit was issued in October 2010, which included additional requirements beyond the first cycle of the permit. More information about the NPDES program can be found on the Tennessee Department of Environment and Conservation (TDEC) Division of Water Pollution Control webpage.

(http://www.tn.gov/environment/wpc/stormh2o/MS4II.shtml)

In response to this unfunded federal mandate and with the support of a citizen's Stormwater Advisory Committee (SWAC), the City of Kingsport developed an enhanced stormwater program and established a stormwater utility funding mechanism with the passage of Ordinance No. 6146 (Stormwater Utility Ordinance) on November 1, 2011. The Utility provides the City with the authorization to establish and collect rates, fees, and charges for the stormwater services, programs and facilities provided by the City. Opportunities for credits and adjustments were also created in the utility ordinance.

As such, the purpose of this manual is to describe policies set forth by the City of Kingsport concerning stormwater management service charge credits and adjustments. The remainder of this section defines terms used throughout the manual and provides background on stormwater management. Section 2 details the process for stormwater fee adjustments, while Section 3 describes the details of the stormwater fee credit policy. Appendices to this document will contain applications, instructions, and checklists to assist customers with credits and adjustments.

Please note that the rules and policies described in this manual are subject to change should the City modify any existing stormwater ordinances or if the State or Federal government alters the City's NPDES Phase II stormwater permit. The current permit is set to expire in 2015.

1.1 Definitions

All definitions as used in the credit manual, unless the context clearly indicates otherwise, shall have the meanings assigned in the following sections. In case a definition provided herein is different than Ordinance 6146, the Ordinance presides. Words not defined in this section will have the meaning given by common and/or ordinary use as defined in the latest edition of Webster's Dictionary.

Agricultural Lands – Agricultural Lands are lands upon which the owner and/or operator conducts activities that enable the owner and/or operator to satisfy the requirements of a qualified farmer or nurseryman, as defined in Tennessee Code Annotated § 67-6-207.

Adjustment - An Adjustment is a change made to a fee to correct an overcharge or an undercharge of a customer's stormwater management service charge.

Built-upon area (BUA) - That portion of a development project that is covered by impervious or partially impervious surface (see impervious surface area for more information).

City Standards – City Standards includes those standards for design, construction and maintenance of stormwater facilities. These standards are found within the City Stormwater Management Manual and include, but are not limited to: Regulatory and Planning Guidance (Ch. 2), Stormwater Quality Guidelines, and Design and Maintenance of Structural BMPs (Ch. 4). The complete Manual can be found on the City's website: **http://publicworks.kingsporttn.gov/node/107**

Credit - A credit is a fee reduction a customer receives for implementing practices that mitigate the peak discharge or runoff pollution or decreases the City's cost of maintaining the system beyond standard (base) requirements.

Credit Application - Credit Applications are those applications for new or existing stormwater facilities.

Customer - Customer is the person or entity to which a Fee is sent. Customers may include the owner, occupant, or tenant of property, a homeowner's association with responsibility for property or for common areas associated with property, or a person or entity who has requested in writing to be the recipient of the fee for a property.

Developed Property - Developed property means real property which has been altered from its natural state by the creation or addition of an impervious surface area, by the addition of any buildings, structures, pavement or other improvements.

Fee – Fee or Stormwater user's fee means the charge established by resolution, and levied on owners or users of parcels or pieces of real property to fund the costs of stormwater management and of operating, maintaining, and improving the stormwater system in the city. The stormwater user's fees are in addition to any other fee that the city has the right to charge under any other rule or regulation of the city.

Impervious surface – This means an impermeable surface which prevents the percolation of water into the soil including, but not limited to, pavement, parking areas and driveways, packed gravel or soil, or rooftops.

Impervious surface area – This means the number of square feet of horizontal surface covered by buildings, and other impervious surfaces. All building measurements will be made between exterior faces of walls, foundations, columns or other means of support or enclosure.

Large Single Family - A large single-family residence is a residence defined as approximately 1.4 SFU, or any property with greater than 6,270 square feet of impervious surface.

Maintain or Maintenance - This means any action necessary to keep stormwater best management practices and devices in proper working condition, so that such facilities will continue to comply with State law and City standards to prevent safety hazards, to prevent public nuisances, and to prevent the failure of stormwater control measures and devices and to function as credited. Maintenance includes activities identified on approved stormwater control plans, any applicable stormwater operations and maintenance manual, any applicable agreements or certifications to the City, and those activities outlined in the City's Stormwater Management Manual.

Medium Single Family - A medium single-family residence is a residence defined as approximately 1 SFU, or any property with an impervious area ranging from 1,913 to 6,269 square feet of impervious surface.

Municipal Storm Sewer (System) - The system of roadside drainage, roadside curbs and gutters, curb inlets, swales, catch basins, culverts, cross drains, headwalls, junction boxes, outlets, manholes, gutters, ditches, pipes, lakes, ponds, sinkholes, channels, creeks, streams, storm drains, water quality best management practices, and similar conveyances and facilities, both natural and manmade, located within the City which are designated or used for collecting, storing, or conveying stormwater, or through which stormwater is collected, treated, stored or conveyed, whether owned or operated by the City of Kingsport or other owner/operator/person.

National Pollutant Discharge Elimination System (NPDES) - As authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point source and non-point source discharges into waters of the United States. Phase I of the NPDES Storm Water Program began in 1990 and applied to large and medium municipal separate storm sewer systems (MS4) and 11 industrial categories including construction sites disturbing five acres of land or more. Phase II of the NPDES Storm Water Program began in 2003 and applies to additional MS4s and construction sites disturbing equal to or greater than one but less than five acres of land. Operators of MS4s covered by Phase I and II must obtain an NPDES permit for their storm water discharges. Once they receive their discharge permit, they must fully implement all storm water runoff control practices identified in the permit.

Non-Single Family Residential Property – This means land that is zoned, developed or used solely as residential land, including, but not limited to, duplexes, townhouses,

apartments, condominiums, mobile homes, mobile home parks, mixed use buildings and other multi-unit residential developments, or any other lands upon which there are residential structures that contain more than one (1) dwelling unit.

Other Developed Property – This means developed property other than single-family or non-single-family residential property. Such property includes, but not be limited to, commercial properties, industrial properties, parking lots, hospitals, schools, recreational and cultural facilities, hotels, offices, churches, and mixed-use property.

Pre-Developed Conditions – The condition of a property before development on the parcel occurs (i.e. forested or open space).

Post-Developed Conditions – The condition of a property following any development activity on the parcel. For upstream areas, this refers to complete build-out conditions, as determined from current zoning and the City's Planning and Development Department.

Property Owner (Owner) – This means the property owner of record as listed in the county's assessment roll. A property owner includes any individual, corporation, firm, partnership, or group of individuals acting as a unit, and any trustee, receiver, or personal representative.

Single-Family Residential Property – This means a developed property which serves the primary purpose of providing one detached dwelling unit for one family or housekeeping unit, but this does include single wide mobile homes, even if attached to the land or there is only one unit on the property.

Single-Family Unit or SFU - This means the average square footage of the impervious surface area for a single-family residential property determined pursuant to Ordinance No. 6146.

Small Single-Family Residence - A small single-family residence is a residence defined as approximately 0.7 SFU, or any property with less than 1,912 square feet of impervious surface.

Stormwater Facility (Facility) - A stormwater facility is any mechanism constructed to manage stormwater quantity and/or quality. Another term used for a facility is Best Management Practice (BMP).

Stormwater Flood Control Facility - A stormwater flood control facility shall mean all natural and manmade conveyances and structures for which the partial or full purpose or use is to convey surface water within the jurisdictional boundaries of the city. This includes all natural conveyances for which the city has assumed a level of maintenance responsibility, to which the city has made improvements, against the flooding of which the city must make provision to protect public and private

property, or for which the city is accountable under federal or state regulations for protecting the water quality within its jurisdictional boundaries.

Stormwater Management Manual - The Stormwater Management Manual is a manual provided by the City Engineering Department, which gives guidance in designing and maintaining stormwater management facilities and may be downloaded from the City of Kingsport at the following web address:

http://publicworks.kingsporttn.gov/node/107

Stormwater Management Service Charge (Fee) – The fee is the charge to provide stormwater services to developed property. The charge is based upon the single-family equivalent residential unit (SFU) as calculated for that property and multiplied by the single family equivalent residential unit rate.

Stormwater Management Fund or Fund - This means the fund created by Ordinance No. 6146 to operate, maintain, and improve the city's stormwater system.

Stormwater Management Ordinance - Stormwater Management Ordinance means Appendix A of the City of Kingsport Stormwater Management Manual, as amended to date, which details the City's stormwater runoff and policies.

Stormwater Services - Stormwater services means City stormwater management programs designed to protect water quality by controlling the level of pollutants in, and the quantity and flow of, stormwater and City service of structural and natural stormwater and drainage systems of all types. Stormwater services include any cost necessary to assure that all aspects of stormwater quality and quantity are managed in accordance with federal and State laws, regulations and rules, and costs related to the mapping, planning, construction, operation, maintenance, inspection, management and regulation of the stormwater management system and the regulation of impervious surface and stormwater.

Stormwater Utility Ordinance – Stormwater Utility Ordinance means Ordinance #6146 in Chapter 106 of the City of Kingsport Code of Ordinance, as amended to date.

Undeveloped Land – Undeveloped land means all land that is not altered from its natural state to extent that results in less than five hundred (500) total square feet of impervious surface area per individual lot.

2-year, 24-hour storm - The surface runoff resulting from a 24-hour rainfall of an intensity expected to be equaled or exceeded, on average, once in 2 years and with a duration of 24 hours.

10-year, 24-hour storm - The surface runoff resulting from a 24-hour rainfall of an intensity expected to be equaled or exceeded, on average, once in 10 years and with a duration of 24 hours.

50-year, 24-hour storm - The surface runoff resulting from a 24-hour rainfall of an intensity expected to be equaled or exceeded, on average, once in 50 years and with a duration of 24 hours.

100-year, 24-hour storm - The surface runoff resulting from a 24-hour rainfall of an intensity expected to be equaled or exceeded, on average, once in 100 years and with a duration of 24 hours.

1.2 Responsibility

Stormwater services are provided to citizens by the City of Kingsport Public Works Department. The Public Works Director has responsibility for the operation and maintenance of the Stormwater Utility. The Public Works Director also is responsible for the organization and operation and maintenance staff, the planning and assessment of the stormwater management system, enforcement of soil erosion and sedimentation control regulations, the stormwater management ordinance, and the management of capital improvement drainage programs. The responsibility for billing of stormwater management service charges will be that of the Finance Director.

1.3 Stormwater Management

Development covers land with impervious cover, allowing less stormwater to infiltrate than could under pre-development (natural) conditions. Increased impervious cover leads to larger volumes and higher rates of stormwater runoff, which pose a threat to the public health, safety, and welfare because, if unmanaged, the increased runoff may flood emergency vehicle routes and properties, erode watercourses and channels, and pollute streams and rivers.

Stormwater Management is the practice of managing stormwater runoff in order to avoid water quantity and water quality problems. By mapping, planning, constructing, operating, cleaning, regulating and maintaining natural and constructed stormwater management facilities, the City reduces the adverse effects of stormwater and improves the quality of groundwater, streams, rivers, and lakes in and around the City.

1.4 Stormwater Utility

In order to provide a stable source of funding for the City to provide Stormwater Services, which benefit owners and occupants of developed land in the City and other Kingsport citizens, the City has established a stormwater utility. It is administered similar to a water or wastewater utility. As a water utility fee is proportional to the demand for water by a customer, the stormwater management service charge (fee) is proportional to the demand for stormwater services as measured by the amount of impervious area on a property. Impervious area is the single most important factor affecting the peak rate of runoff, the total volume discharged, and pollutant loadings of stormwater that flows from a property.

1.5 Credits and Adjustments

The City has established opportunities for customers to receive credits and adjustments in the Stormwater Utility Ordinance. Credits are associated with the construction, operation, and maintenance of privately owned stormwater facilities beyond the base standards and which benefit the City. Adjustments are fee changes due to errors, omissions or corrections made in the fee paid by a customer.

Customers may qualify for credit when they can demonstrate to the satisfaction of the Public Works Director that their existing or new stormwater facility provides cost savings the City would otherwise incur as part of City stormwater management efforts. Credits may only be applied to the property where the stormwater facility is located. The facility must comply with Section 3 et seq. of this Manual and meet or exceed the minimum City requirements for stormwater runoff control, which may be found in Chapter 3 and Appendix A of the City's Stormwater Management Manual and the Stormwater Management Ordinance.

The City has also established an appeals process that allows customers to appeal for adjustment if they determine their fee is applied in error. Section 2 of this Manual details the policy for appeals for adjustment while Section 3 details the credit opportunities available to customers.

Section 2
Appeals for Adjustment

Adjustments may be available to a customer through the appeals process specified in the Stormwater Utility Ordinance No. 6146. An adjustment is a change made to a fee to correct an overcharge or an undercharge of a customer's stormwater management service charge. Adjustments are not to be confused with credits, which are intended to reduce a fee by a percentage reflecting the system benefit from customer implemented stormwater management practices. The reader should not view this document as a sole source but as a guide to assist in interpreting policies set forth in the Stormwater Utility Ordinance and the Stormwater Management Ordinance. Requests for adjustment of the stormwater user fee shall be submitted through the Public Works Director, who has the authority to administer the procedures and standards, and review criteria for the adjustment of fees as established herein. The Public Works Director shall respond in writing within 60-days to all adjustment requests. The response shall provide an explanation of adjustment approval or denial as well as requests for additional information. Adjustment denials may be appealed to the Public Works Director and then to the Stormwater Advisory Committee as discussed in Section 2.6. All requests shall be judged on the basis of the amount of impervious area on the site. Adjustment opportunities are detailed below.

2.1 Impervious Area Measurement and Tier Adjustment

The City has applied County Tax Records and GIS technology to determine the impervious surface area for all properties within the City limits, using both direct measurement for other developed property and statistical analysis for single-family residential properties. Fees assigned to single-family residential properties are based on a tiered rate structure. A three-tiered fee structure was developed defining a "Small Single Family" residence as property approximately 70 percent of the average SFU, with less than 1,912 square feet of impervious surface. A "Medium Single Family" residence is defined as a property approximately one SFU, with 1,913 to 6,269 square feet of impervious surfaces, and a "Large Single Family" residence is approximately 1.4 SFU with greater than 6,270 square feet of impervious surfaces. The fee assigned to each single family residence is based on their assigned tier. If a single-family residential customer has reason to believe that the tier assignment component of their stormwater user fee is incorrect, they may submit a written adjustment request on Stormwater Management Utility Form No. 1 (Appendix A).

Similarly, if a non-residential customer has reason to believe that the impervious surface area component of their stormwater fee is incorrect they may submit a written adjustment request on Stormwater Management Utility Form No. 2 (Appendix A). The first step in the non-residential adjustment process will be a review of the City's calculation of the impervious area. If resolution is not achieved, the City may request the customer to provide supplemental information to the Public Works Director. Failure to provide such information may result in the denial of the adjustment request.

2.2 Minimum Impervious Area Adjustment

A fee will not be charged to customers with less than 500 square feet of impervious surface area. A customer receiving a fee for property with less than 500 square feet of impervious surface area will be eligible for an adjustment through the appeals process.

2.3 Property Classification Adjustment

Properties that have been incorrectly classified by use may be eligible for an adjustment under the appeals process. For example, residential properties that have been classified as commercial property may seek a reclassification and a correction of the fee charged to the property. This policy also addresses the classification of customers into the tiered residential rate structure.

2.4 Additional Stormwater Fee Adjustments

In addition to the adjustments based on errors in impervious area calculation, adjustments may also be given when a customer meets any of the following requirements:

(1) The customer demonstrates that rainfall occurs on an impervious area does not generate runoff (has no outlet), is completely watertight, and has at least 2 ft of freeboard. The purpose of this adjustment is to credit unusual structures, such as swimming pools, hazardous material storage areas, etc. For these specific cases, customer's SFUs will be adjusted by removing from the SFU calculation the amount of impervious area that does not generate runoff. This may require registered professional engineering calculations.

(2) The customer demonstrates that on-site gravel is not compacted, not used for vehicular traffic, and is pervious. The City may grant adjustments for non-compacted gravel areas used for landscaping or other purposes.

(3) The City of Kingsport expends funds for dealing with the quality and quantity of all surface waters flowing within its boundaries that carry public water. Thus these systems are defined in Section 1 and may be man-made or natural systems. Customers whose stormwater runoff does not discharge into a stormwater flood control facility managed by the City shall be exempt from paying the user fee. Adjustments will be granted only for that portion of the property's impervious surface area that does not discharge through the stormwater flood control facility managed by the City.

2.5 Exemptions

Most developed land in the City, whether public or private, is subject to a stormwater fee. However, the City will grant exemptions from stormwater fees for specified properties. Exemptions shall not be allowed based on age, tax exemption, or other status of an individual or organization. The following exemptions from stormwater fees are allowed:

1) Property which stormwater runoff is not discharged into or through the stormwater flood control facilities, or both, of the city;

2) Owners and/or operators of agricultural property, in the city, upon which the owner and/or operator conducts activities that enable the owner and/or operator to satisfy the requirements of a qualified farmer or nurseryman, as defined in Tennessee Code Annotated, Section 67-6-207.

3) Undeveloped property that is not altered from its natural state.

4) Developed property with less than five hundred (500) total square feet of impervious surface area per individual lot.

5) Improved public transportation ways, including public streets, roads, sidewalks, mobility paths, greenways and trails, airport runways, and internal roads within public facilities, which have been conveyed to the city and are used by the general public for motor vehicle transportation.

6) Railroad tracks, provided, however, railroad stations, maintenance buildings or other developed land will not be exempt from stormwater user fees.

2.6 Process of Appealing for an Adjustment

Adjustments are obtained by participating in the appeals process described above and in Section <**LIST No. HERE**> of the Stormwater Utility Ordinance. Any customer determining their fee is not in proportion to the amount of impervious surface area on their property may apply for an adjustment by submitting the appeals form in Appendix A to the Public Works Director. As part of the submission, the customer must provide the City with evidence or justification for the correction of the fee in question. In some cases, the customer may also be required to submit, at his or her expense, a survey prepared by a registered land surveyor or other information. The Public Works Director may take the appeal to the Stormwater Advisory Committee for their review and/or comment. Once the Public Works Director has made a determination on the matter, the customer is allowed 30 days (after service of written notice) to file an appeal with the Stormwater Advisory Committee.

Customers awarded an adjustment by the City may be eligible to receive the adjustment retroactive to February 1, 2012 but in no case longer than one prior year. Adjustments will not be awarded for any period preceding fee inception or preceding the date at which the City judges the stormwater runoff generated from the property is inconsistent with the fee paid. Reimbursement for the one-year retroactive payment will be applied to future fees until the correction is made (i.e. zero-balance on future bills until the fee is reimbursed in full to the customer).

This policy also applies to cases where the City determines that the fee for a property is less than it should be based on the amount of impervious surface area on the property. In instances in which City has not billed or incorrectly billed a customer, the City may retroactively bill customers for the exact unbilled or incorrectly billed time period up to one prior year. In such instances, the customer will be entitled to make payments over the same length of time in which the billing error or omission occurred.

Section 3
Stormwater Fee Credit Opportunities

A customer may be eligible for a credit under the following categories: 1) the customer has installed a stormwater facility to the standards specified in this document to control stormwater quantity, 2) the customer has installed a stormwater facility to the standards specified in this document to control stormwater quality, (3) the customer holds and is in compliance with an NPDES Industrial Stormwater Permit, or 4) the customer agrees to provide stormwater education. For water quality and water quantity credits, some engineering calculations may be required to receive credit. Therefore, certain parts of the application are required to be performed by a registered professional engineer. Original design documents may suffice. It is the responsibility of each nonresidential customer to provide the proper documentation for this credit. Single-family residential developed property(s) are only eligible for water quantity and/or water quality credits if the stormwater facility subject to the credit is wholly owned and operated by one entity (such as a neighborhood association or other legally-recognized organization) and it can be demonstrated that the activity reduces the stormwater management burden caused by each customer. In such instances, each dwelling unit demonstrated to contribute runoff to the qualifying stormwater facility may be eligible for its equal pro-rata share of the credit unless other arrangements for billing the stormwater fee to the homeowner's association was made.

The maximum allowable credit for any combination of the four possible credits is 75 percent, which is approximately the percent of the fee allocated towards regulatory compliance, operation and maintenance services and capital improvement projects. Customers may not receive credits for the City's program management and administration services.

The following sections describe the four types of stormwater fee credit opportunities, eligibility requirements, credit enforcement, and the process of applying for the credit program. The reader should not view this document as a sole source but as a guide to assist in interpreting policies set forth in the Stormwater Utility Ordinance.

3.1 Stormwater Facility- Water Quantity Credit

The City's Stormwater Management Ordinance mandates engineered stormwater controls to minimize the qualitative and quantitative impacts of runoff and ensure compliance with state and federal regulations. For installing stormwater facilities exceeding City requirements specified in the stormwater ordinance, customers will be eligible for a maximum credit of 50%.

To qualify, customers must demonstrate that their existing or new stormwater facility manages stormwater generated from their immediate property and/or upstream tributary areas. In addition, the facility must meet or exceed design criteria outlined in the stormwater management manual, effectively reducing City stormwater

management costs by lowering capital costs. The stormwater facility must also meet all Tennessee State Dam Safety standards. For each of the design storms discussed in the following sections, the stormwater facility must be designed to control the peak runoff rate from the post-developed conditions back to the pre-developed conditions, as defined in Section 1 of this Manual. The structure of the stormwater facility credit is explained below.

Table 1 shows the credit opportunities for customers with a stormwater facility that controls on-site stormwater runoff. A customer that installs a stormwater facility to control on-site stormwater runoff may be eligible for a maximum credit of 50 percent. The percent of actual credit offered is determined by the size of the design storm event controlled by the stormwater facility, ranging from the 2-yr, 10-yr, 25-yr and 100-yr 24-hour design storm events.

Additional credits are available for customers with a stormwater facility that controls runoff from an upstream tributary area, which means a customer is controlling runoff from offsite. A customer controlling runoff from an upstream area, of which is at least one acre in size, is eligible for a maximum credit of 10 percent in addition to the on-site credit. As an example, a customer controlling both their onsite drainage area and an upstream tributary area greater than 1 acre for the 10-year, 24-hour or larger design storm event would be eligible for a maximum stormwater fee credit of 45 percent (35% plus 10% bonus). In the case of a facility controlling upstream drainage area, the post-developed condition must be calculated based on ultimate build-out of the upstream drainage area as determined from current zoning.

Table 1 - Stormwater Facility Credit Opportunities (Onsite Controls)

Storm Event for which Onsite Stormwater is Controlled by Stormwater Facilities	Credit Opportunity
2- year, and 10-year Storm Event	20%
2-, 10-, and 25-year Storm Event	35%
2-, 10-, 25-, and 100-year Storm Event	50%

Note: A stormwater facility controlling greater than the 100-year design storm receives the same credit as the 100-year storm event.

3.1.1. Water Quantity Credit Example:

A property contains a total impervious surface area of 300,000 sq. ft. A stormwater detention pond on the property receives drainage from all impervious surface areas on the site, and is properly designed for the 2-yr, 10-yr and 25-year design storm event.

- Gross SFUs = (300,000 sq ft) / (3,794 SFU) = 79.1 SFUs
- Initial stormwater user fee = (79.1 SFUs) x ($3.50/SFU/Month) = $276.85/month
- 100% of all site impervious area drains to the detention pond
- Credit amount - 35% credit for adequately controlling the 25-year storm event for all site impervious areas. Credited SFUs = 79.1 SFUs x 0.35 = 27.7 SFUs

  Adjusted Stormwater User Fee = (79.1 SFUs - 27.7 SFUs) x ($3.50/SFU/Month) = $179.90/month

Example Summary
Initial Stormwater User Fee $276.85/Month
User Fee Credit Adjustment - $96.90/Month
Final (Adjusted) Stormwater User Fee $179.90/Month
Savings of $96.90/Month or $1,163.80/Year

3.2 Stormwater Facility- Water Quality Credit

Water quality credits are offered to properties that discharge a portion of the runoff to approved best management practices (BMPs) which significantly reduce pollutants in stormwater runoff. Approved BMPs may include, but are not limited to, natural areas, such as a filter strips, natural preservation area which provides water quality benefits and groundwater recharge or has water quality incorporated on site in some other structural BMP (such as an oil/grit separator), specially designed detention/retention structures or some other approved methods.

The goal for water quality practices is for the removal of 80% total suspended solids and treatment of the first flush of runoff, typically associated with the first 1.0 inch of rainfall. Approved water quality credits can be applied in addition to any approved water quantity credits. The maximum water quality credit for a property is 50% reduction in stormwater user fees. Similar to the quantity credit above, a 10% bonus fee reduction is offered for properties that treat upstream or adjacent areas greater than 1-acre.

The water quality credit will be determined based on the BMP's ability to meet the 80% total suspended solids removal target. Engineering calculations must be provided by the applicant that justifies the BMP's effectiveness. The credit will be

granted only for the portion of impervious area that drains to the BMP (i.e. ratio of BMP drainage area to total site area). Credits will not be offered for sites that opt to use off-site management.

Credit can only be given when the BMP is sized, designed, constructed and maintained in accordance with the recommended specifications. The approved design, maintenance and removal rate of an individual BMP will be determined by information supplied by the City's Stormwater Management Manual or other reference documents. Poorly designed and maintained BMPs reduce pollutant removal performance, thus improperly designed and maintained Facilities will not be given credit. Each property will be evaluated on a case-by-case basis to assess performance and design criteria.

3.3 NPDES Industrial Stormwater Permit Credit

Customers holding NPDES Industrial Stormwater Permits, on file with Tennessee Department of Environment and Conservation (TDEC), will be eligible for a credit of 15 percent. The customer will only be eligible for the credit if the customer is performing activities in full compliance with their NPDES Industrial permit. Any violations of the NPDES permit, as determined by TDEC, will make the property ineligible for a credit. The NPDES Industrial Permit credit may also be received in addition to the stormwater facility credits listed above for a credit of up to 75 percent. The customer must provide all required reporting information with the NPDES credit application, on-going visual inspection reports and any notifications of violations, as described in the application (Appendix A) to continue to receive the credit.

3.4 Stormwater Education Credit

A stormwater education credit is available to public and private schools, which have appropriate accreditation and develop a lesson plan that is consistent with the educational content deemed appropriate by the U.S. EPA for stormwater education (refer to: http://www.epa.gov/owow/nps/eduinfo.html) and is approved by the Kingsport Engineering Department. The credit for stormwater education with an approved curriculum is 20 percent. The stormwater education credit may also be received in addition to the stormwater facility credit listed above for a credit of up to 75 percent.

To qualify for the credit, a public or private school must have a documented enrollment of 50 students or more, and must provide an environmental science curriculum approved by the Kingsport Engineering Department.

Stormwater education credits are based on the ratio of students taught in the stormwater curriculum, by teacher(s), to the total number of students enrolled in the school. The credit will go into effect after the material has been taught to at least one classroom and after this application for credit has been submitted to the Public Works Director and approved. Thereafter, provided the material is scheduled to be taught to all students of a grade level, the credit will remain in effect through the end of the

school year up to June 30th. The credit will be continued into the upcoming school year if the principal or superintendent submits a certification that the material will be taught in the upcoming school year. Once use of approved material has begun and credit applied, it will continue to be applied as long as the annual certification is submitted. The certification must be in writing; include total number of students in the school, in what grade level(s) approved material is taught, by how many teachers, and to how many students. An example of an annual certificate is provided in Appendix A.

3.4.1. Stormwater Education Credit Example:

School ABC in Kingsport, TN has 100 students enrolled. One class, of 30 students, is taught the stormwater curriculum.

- Ratio of Students Taught = (30 students taught) / (100 students enrolled at ABC) = 0.30 (30% of the students are taught the stormwater curriculum)
- Stormwater education credit is 20% at any public or private school with 50 enrolled students or more
- Credit achieved by the school = 0.30 X 20% = 6% credit

Example Summary
School ABC has a 100 student enrollment
30 of the 100 students are taught the approved stormwater curriculum
Final stormwater user fee credit is 6%

3.5 Eligibility for Credits

In order to be eligible for a credit, the customer will be responsible for providing the City with justification for meeting one of the fee credit options described above. Customers must meet all requirements detailed in Section 3, et seq., and may apply the credit only to developed property(s) containing the credited stormwater facility or non-structural control. For developments with credited stormwater facilities in common areas such as a townhouse development, cluster unit developments, or condominiums, each dwelling unit or condominium unit shall be eligible for its equal pro-rata share of the credit unless other arrangements for billing the fees are made pursuant to the stormwater utility ordinance. Customers may file an application for credit prior to final construction of a stormwater facility. If approved, the credit will be held until the certificate of occupancy for the site is granted. In this circumstance, credits will not be awarded retroactively but will appear on the first utility bill.

3.5.1 Customers

Section <**INSERT NUMBER**> of the Stormwater Utility Ordinance details the manner in which customers will be billed. As defined in Section 1.1 of this Manual, a customer is the person or entity receiving a bill for stormwater services. Customers may include the owner, occupant, or tenant of property. A customer may also be a person or entity who has requested in writing to receive a bill for stormwater services for a property. Any customer receiving a bill for stormwater services is eligible to receive a credit if they meet requirements for a particular credit specified in Section 3, et seq.

3.5.2 Maintenance Agreement

An owner of stormwater facilities must agree in writing to maintain the credited stormwater facility to City standards and all other applicable standards (ex. Tennessee State Dam Safety standards) in order to be eligible for credit. Maintenance activities to be performed are detailed in Section 7 and Appendix F of the Stormwater Management Manual. Failure to maintain a facility in strict compliance to City standards will result in the loss of the credit and possible surcharge to recapture improper credits. The owner of a credited stormwater facility is responsible for notifying the City if the facility is compromised or damaged in any way or is no longer complying with State law or City standards. The owner of a credited stormwater facility must also notify the City if any repair work is performed that may alter the operation of the facility.

3.5.3 Right of Entry

In order to be eligible for a stormwater facility credit, an owner of a credited stormwater facility must first agree in writing that appropriate City staff have permission to inspect stormwater facilities on the owner's property at any time. Inspection procedures are detailed in Section 3.6.2. Failure to permit City inspection shall terminate the credit.

3.5.4 Stormwater Facility Upgrades

Recognizing that the City's stormwater requirements have evolved over the past three decades, the City will not require current recipients of a credit to upgrade their facilities immediately to conform to future changes in the Stormwater Credit Policy Manual. However, once the credit policy is changed, the City will only guarantee existing credits for a period of five years after the change provided the customer maintains the facility to City standards and the facility otherwise complies with State law. In the event that a facility has not been upgraded to the new standard at the end of the five-year period, the credit will be terminated.

3.6 Stormwater Facility Maintenance

In order to receive a credit, a stormwater facility must be privately maintained in strict compliance to City standards and Tennessee Dam Safety standards where

applicable to ensure that the facility functions as credited at all times. Furthermore, customers must document all operation and maintenance activities and provide the City with this information, if requested. A complete summary of the maintenance requirements can be found in Chapter 7 and Appendix F of the City's Stormwater Management Manual.

3.7 Enforcement

Inspections and annual documentation are the primary methods employed to monitor credits. For structural stormwater controls, failure to maintain and operate the stormwater facility in compliance with City standards will result in the loss of the credit and possible surcharge to recapture improper credits. All credited stormwater facilities are subject to nuisance ordinances of the City as well. For non-structural controls, annual documentation of on-going, credited activities will be required to maintain the credit. The following sections summarize the enforcement procedures.

3.7.1 Structural Stormwater Facility Inspections

The City reserves the right to inspect stormwater facilities receiving a credit at any time. If the field inspection proves that the facility is not being maintained per City standards, or if the facility is not operating as credited, the credit may be forfeited. The City and customer will agree to an appropriate amount of time to bring the facility back into compliance. If this compliance is not achieved within the allotted time, the credit will be forfeited and the customer must repay the City in the form of a surcharge the amount of credit received during the period for which the City determines the stormwater facility was out of compliance.

At a minimum, inspections will be performed annually by the City to assure that a facility is operating as credited (no blockage due to excessive silt, logs, or debris). Additional inspections of problematic areas following large storm events (two inches of rainfall or more over a 24-hour period) may be required. Further information concerning City inspections may be found in Chapter 7 and Appendix F of the Stormwater Management Manual.

3.7.2 Annual Documentation for Non-Structural Controls

Annual documentation (as measured from the date the credit application was approved by the City) must be submitted to the City to continue receiving a credit for a non-structural stormwater control, such as the NPDES Industrial Permit or the education credit. The required documentation consists of the following:

- For NPDES Industrial Permit holders, the customer must submit a copy of the annual report submitted to TDEC. The submittal must also include copies of associated visual inspection reports and notification of any notices of violation related to the permit.

- For the education credit, the customer must provide annual documentation of the on-going education efforts, including the number of students enrolled, the number of students receiving the approved curriculum, notification of any changes to the curriculum, and a commitment letter from school officials that the curriculum will be provided for the upcoming year.

3.8 Applying for a New Stormwater Facility Credit

The following sections present the typical credit application process for a customer that wishes to construct a new stormwater facility. The steps described in Section 3.8.1 are recommended to expedite the application process. Steps described in Sections 3.8.2 through 3.8.4 are required to be eligible for any credit.

3.8.1 Preliminary Interaction with the City

Since the calculations and hydrologic analyses involved in the design of a stormwater facility are complex, a professional engineer registered in the State of Tennessee must seal the design of a new stormwater facility. Therefore, it is highly recommended that the applicant interact with City stormwater engineers first before an applicant hires an engineer to perform these services.

City stormwater engineers will assist the customer in evaluating how a property will fit into the drainage scheme of the City, allowing them to provide valuable insight to one designing a facility. For example, the City stormwater engineer might be able to tell a customer what upstream drainage area a stormwater facility might control. This knowledge and the guidelines in Sections 3.1 through 3.3 allow one to determine the level of credit for which they may be eligible. The City determines the final amount of credit based on the policies of this manual.

3.8.2 Perform Hydrologic Analysis and Design Facility

If a customer decides to install a stormwater facility for which a credit will be requested, a professional engineer licensed in the State of Tennessee must be hired to perform a hydrologic/hydraulic analysis and design a stormwater facility that will achieve the level of credit desired by the customer. Customers seeking credit for an existing facility should refer to Section 3.9.

3.8.3 Complete Application

Once an engineering analysis has been completed, the customer should follow the instructions to fill out the application in Appendix A. This application along with an engineering report will be submitted to the City for final credit determination. A checklist for submitting a complete application to the City is included in the application form. If approved by the City, any credit awarded will appear on the billing cycle following 90 days or less from when the stormwater facility was fully constructed and approved by the City.

3.8.4 Construction of a New Stormwater Facility

If an application is successful, the customer must construct the new stormwater facility before the credit takes effect. The customer must also provide an "as-built" certification to the City which must be sealed by an engineer for all new structures for which a credit is requested.

3.8.5 Inspection of a New or Existing Stormwater Facility

The completed new facility or an existing facility may be subject to inspection by the City to ensure that it will perform as credited.

3.9 Applying for Credits for Existing Facilities

Credit application procedures for existing stormwater facilities are similar to those detailed in Section 3.8 for new stormwater facilities. However, customers requesting credit for an existing stormwater facility will not be required to prepare a new engineering evaluation. In order to be eligible for the credit, the customer must provide as-built documentation and supporting information of the original design, including information pertaining to the level of runoff and/or pollutant reduction. The existing stormwater facility will be subject to an inspection by the City to ensure that the facility has been maintained appropriately and continues to operate as originally designed. The application in Appendix A must be submitted along with the appropriate design/engineering documentation.

3.10 Applying for Credits for NPDES Industrial Stormwater Permit Holders

Since the requirements for NPDES Industrial Stormwater Permit holder may be unique to individual properties, all applicants are required to request a meeting with the City's stormwater staff to discuss the activities performed by the applicant. The applicant must also provide a copy of the NPDES permit, the stormwater pollution prevention plan (if required), monitoring data (if required), verification of permit compliance and any other relevant information. City staff will jointly review the materials with the customer to determine the appropriate credit under this category.

3.11 Applying for Credits for Stormwater Education

The stormwater education credit will be approved on an annual basis for education activities that were performed in the previous school year. Credit received for the prior year's educational activities will be shown on the monthly utility bill over a twelve-month period, starting on the September bill following the school year during which the activities were performed.

The stormwater education credit requires submittal of both an application and an annual report to the Public Works Director. The application need only be completed once, and requires a description of the educational program, list of educational tools used, estimated number of students that will/have receive the education, and the

length of the educational program. Submittal of the application is necessary to indicate to the applicant that the proposed curriculum meets the criteria stated in item 3.4 above, and that a credit will be received pending approval of an annual report to follow.

3.12 Credit Renewal

Credits granted to a customer for any of the eligible credit programs are in effect for one-year. For customers receiving a credit for a structural stormwater control facility, the City will perform annual inspections to determine if the facility is being maintained in compliance with the credit policy. For customers receiving a credit for the NPDES Industrial Permit or education programs, the customer must renew their application annually. Documentation as discussed in each corresponding section above must be submitted along with the renewal application in Appendix A. If the annual documentation or inspection proves the applicant was not in compliance with City requirements, credit will be subject to termination and credit received during any period of non-compliance must be repaid to the City. Appendix A contains detailed instructions for completing the renewal application. A checklist is also included with the form to assist the customer.

3.13 Implementation of the Credit

Depending on when an application for a credit is submitted, whether a stormwater facility is new or existing and/or when a new stormwater facility is fully constructed and approved by the City, implementation may be handled differently as described in the following sections. Generally, it is estimated that applications will take three months to process. Successful applications will receive credits as detailed below.

3.13.1 Credit Applications for New Stormwater Facilities

Customers submitting a credit application for a new stormwater facility will be eligible to receive the credit upon approval of the application by the City. However, no credit will be awarded until the stormwater facility is fully constructed and approved by the City.

3.13.2 Credit Applications for Existing Stormwater Facilities

Customers submitting credit applications for an existing stormwater facility may be eligible to receive credit retroactive to fee inception or up to one prior year from approval of the application, whichever is shorter. Credit will not be awarded for applications for an existing stormwater facility for any time period preceding fee inception or for any time period preceding the date at which the stormwater facility was fully constructed and approved by the City. However, customers must be able to prove the existing stormwater facility complies with Tennessee Dam Safety standards and other applicable State laws and has satisfied relevant credit requirements detailed in Sections 3 et seq. for the time period(s) in question and has been maintained throughout that time period in order to receive the retroactive credit.

3.13.3 Credit Applications for NPDES Industrial Stormwater Permit Holders

Existing permit holders must provide proof of compliance for one-year prior to application of the credit. New NPDES permit holders may apply for the credit at any time, but the credit will not be awarded until the applicant has completed one-year of the permit and shows documentation of full permit compliance.

3.13.4 Credit Applications for Stormwater Education

Similar to NPDES permit holders, applications requesting credit for an existing stormwater education program must provide proof of service for a minimum of one-year prior to the credit request. Applicants for credit related to new stormwater education programs will not receive credit until a minimum of one-year of the education program has been completed and documented.